

UNITED STATES PATENT AND TRADEMARK OFFICE



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

			PBe		
APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	I Ammonium		
10/747,944	12/31/2003		ATTORNEY DOCKET NO.	CONFIRMATION NO.	
	12/31/2003	Hee Bok Kang	HME-K-0010V	6953	
34610 75	590 06/07/2004				
FLESHNER &	FLESHNER & KIM, LLP			EXAMINER	
P.O. BOX 2212	00		BLUM, DAVID S		
CHANTILLY,	VA 20153				
·			ART UNIT	PAPER NUMBER	
			2813		
		,	DATE MAILED: 06/07/2004		

Please find below and/or attached an Office communication concerning this application or proceeding.

			Applicati n N .	Applicant(s)
	Offic	Action Summary	10/747,944	KANG, HEE BOK
	3,,,,	, water Guilliary	Examin r	Art Unit
	The MAI	ING DATE 445	David S Blum	2813
Peri dí	for Reply	LING DATE TRISC Mmunication	appears on the cover sheet v	vith the corresp ndence address
- Ext afte - If th - If N - Fail Any	ensions of time nersions of time ner SIX (6) MONTH the period for reply O period for reply ure to reply withing reply received b	O STATUTORY PERIOD FOR REDATE OF THIS COMMUNICATION may be available under the provisions of 37 CFR HS from the mailing date of this communication. As specified above is less than thirty (30) days, a yis specified above, the maximum statutory per not the set or extended period for reply will, by state that the main the set or extended period for reply will, by the Office later than three months after the main disjustment. See 37 CFR 1.704(b).	IN. R 1.136(a). In no event, however, may a reply within the statutory minimum of thi idd will apply and will expire SIX (6) MO	reply be timely filed irty (30) days will be considered timely. NTHS from the mailing date of this communication
Status				
1)	Responsiv	re to communication(s) filed on		
2a)[This action		his action is non-final.	
3)[Since this	application is in condition for allow	Vance except for formal mat	ters, prosecution as to the merits is
	closed in a	ccordance with the practice unde	r Ex parte Quayle, 1935 C.D). 11, 453 O.G. 213
Disposit	ion of Clain		, , , , , , , , , , , , , , , , , , , ,	
		<u>-9</u> is/are pending in the application	_	
		above claim(s) is/are withd		
5)	Claim(s)	is/are allowed.	rawn from consideration.	
		is/are rejected.		
		is/are objected to.		
		g are subject to restriction and/or	alast.	
٠,١		v are subject to restriction and/or	election requirement.	
Applicati	on Papers			
9)[]	The specific	ation is objected to by the Examir	ner.	
10)[The drawing	g(s) filed on is/are: a)☐ ac	cepted or b) objected to be	ov the Eveniner
	Applicant ma	y not request that any objection to th	e drawing(s) he held in abevan	20 See 27 CED 4 05/2)
	Replacemen	t drawing sheet(s) including the corre	ction is required if the drawing	s) is objected to. See 37 CFR 1.121(d).
11) 🔲 🗆	The oath or	declaration is objected to by the E	Examiner Note the attached	Office Action on forms DTC 459
	nder 35 U.S		The state of the s	Office Action or form P10-152.
		•		
12)[_] 6	ACKNOWIEdgi	ment is made of a claim for foreig	n priority under 35 U.S.C. §	119(a)-(d) or (f).
		Some * c)☐ None of:		
	Certifi	ed copies of the priority documen	its have been received.	
	Z.∐ Certifi	ed copies of the priority documen	its have been received in Ap	plication No
•	o. L Copie	s of the certified copies of the price	ority documents have been r	eceived in this National Stage
	applic	ation from the International Burea	iu (PCT Rule 17,2(a)).	
~ 56	e the attach	ned detailed Office action for a list	t of the certified copies not re	eceived.
ttachment(s	s)			
Notice	of References	Cited (PTO-892)	4) 🗖 المناسبة المناسب	
	of Draftspersor	n's Patent Drawing Review (PTO-948)	4) Interview Sui Paper No(s)/	mmary (PTO-413) Mail Date
i i Intorma	ation Disclosure	Statement(s) (PTO-1449 or PTO/SR/08)	5) Notice of Info	ormal Patent Application (PTO-152)
Paper N	No(s)/Mail Date	, , , , , , , , , , , , , , , , , , , ,	6) 🔲 Other:	Phone and (1 10-102)

This action is in response to the application paper filed 12/31/03.

DETAILED ACTION

Election/Restrictions

1. This application contains claims directed to the following patentably distinct species of the claimed invention:

Claim 1 (step 2) and thus dependent claims 2-3, limit the formation of a NAND type non-volatile ferroelectric memory cell to forming capacitor first electrodes over wordlines excluding an (N)th wordline with a metal barrier disposed inbetween. Claim 4 (step 2) and thus dependent claims 5-9, limits the formation of a NAND type non-volatile ferroelectric memory cell to forming wordlines over the (capacitor) first electrodes with a ferroelectric film disposed inbetween...

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claim is generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

2. A telephone call was made to Carl Wesolowski on 5/13/04 to request an oral election to the above restriction requirement, but did not result in an election being made.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David S. Blum whose telephone number is (757)-272-1687) and e-mail address is David.blum@USPTO.gov.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Whitehead Jr., can be reached at (571)-272-1702. Our facsimile

Application/Control Number: 10/747,944

Art Unit: 2813

Page 4

number all patent correspondence to be entered into an application is (703) 872-9306. The facsimile number for customer service is (703)-872-9317.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David S. Blum

Da 05h

June 1, 2004